

## HINTS PROPOSAL

**Proposed Title:** Being touched by cancer: How personal experience with cancer influences health behaviors

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### Research questions:

1. How does personal experience of cancer affect health care utilization and health insurance status?
2. How does personal experience of cancer affect people's cancer screening in terms of:
  - a. awareness of cancer screening modalities?
  - b. receipt of cancer screening recommendations from physicians?
  - c. self-reported practice of cancer screening?
3. How does personal experience of cancer affect people's practice of other health promotion behaviors, including exercise, smoking, diet/ energy balance?
4. How does personal experience of cancer affect people's physical and emotional health status?

We will first examine these research questions by investigating responses within the group of cancer survivors. Specifically, we will evaluate differences in responses to the above questions within the cancer survivor group by sociodemographics, type of cancer, and time since diagnosis. These questions will then be investigated again to compare differences between three groups comprised of individuals with various levels of exposure to cancer (i.e. those with a personal history of cancer, those with a family history of cancer, and those with no cancer history).

### Study description/rationale:

The purpose of this study is to examine the influence of varying levels of experience with cancer on cancer prevention and health promotion behaviors in a national sample. Survey respondents fall into one of three categories: Personal history of cancer, family history of cancer, and no history of cancer (neither family nor personal). It is not known whether those who have personal experience with cancer utilize the health care system differently than those who do not, or if the amount of time that has elapsed since receiving a cancer diagnosis influences health care utilization and preventive health behaviors.

Similarly, rates of undergoing screening for cervical, breast, colorectal, and prostate cancer are lower than recommended by screening guidelines in the general population, but little is known how personal and family experience with cancer is associated with awareness and practice of cancer screening. Previous investigations of factors associated with screening have found that the strongest predictor of screening is receiving a physician recommendation to have the screen, suggesting that this form of communication is essential to health care outcomes. However, little is known about how personal experience with cancer relates to interactions with providers about future screening recommendations. Often cancer survivors are excluded from studies of cancer screening behavior because it is thought that their motivations for screening might differ from that of the general population. Finally, it is not known whether differences in cancer screening that may exist between groups with different experiences of cancer may also

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carry over into other health promotion behaviors that have been found to be related to cancer incidence, such as smoking, exercise, and diet.

**Variable list:**

**Demographics**

HE-13 Age Range

HE-14 Gender

DM6 Education

DM7 Income

DM5 Ethnicity

DM2 Marital Status

**Patient Provider Interaction**

HC-2 Who is Provider?

HC-3 Frequency of Going to Provider

HC-4a-e Frequency of Provider Communication Activity

**Cancer History**

CH-1 Have Cancer

CH-2 Type of Cancer

CH-3 Time since Diagnosis

CH-4 Family Cancer History

**Cancer Knowledge**

CK 4-6 Preventability of Cancer

CK 10-12 Interest in lifestyle change

CK 14 a-c Fatalism

CK15 Type of Cancer & Mortality

**Types of Cancer**

CC-4 Colon Cancer Awareness of Tests

CC-4A- CC7 FOBT

CC 15A-CC18 SIG/COL

CC-14-15, CC-25 Screening Guidelines

CC-12, BC-11, CV-6 Intentions to screen in the future

BC-4-6 Mammogram (no awareness, just recommendation and behavior)

BC-13,14 Mammogram guidelines

CV-1-2 (no awareness, just recommendation and behavior)

PC-3 Awareness of PSA

PC-4 Recommended PSA

PC-5-6 PSA Screen

TU-1-7 Tobacco Use

EX-1-2 Exercise

FV-1-4 Diet

HW-1-2 Obesity

HS-1-3 Health Status (physical & emotional)

HS-5 Health insurance

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**Method of analysis:**

As noted above, we will first analyze our research questions using responses from the cancer survivor sub-sample alone. Second, these questions will be investigated using between-group analyses.

**Within group**

We will use descriptive and multivariate statistics, such as logistic and multiple linear regression analyses to examine differences among cancer survivors by sociodemographics, type of cancer, and time since diagnosis on survivors' utilization of healthcare (availability of usual source of care, frequency of visits), health insurance status, assessment of patient-provider communication, cancer knowledge, frequency of self-reported screening behavior, awareness of cancer screening, practice of other preventive health behaviors (smoking, exercise, diet), self-reported health status, and the providers' recommendation of screening,.

**Between group**

We will then compare the response of cancer survivors as a group with responses of participants with a family history of cancer and those with no cancer history on each of the above variables. Multivariate analyses will control for relevant sociodemographic variables.

**References:**

1. ....
2. ....
3. ....

**Targeted Journal:**

Abstract submission for presentation at a conference (such as Society of Behavioral Medicine, ASPO). We will submit the manuscript for publication in an appropriate journal (Preventive Medicine, Journal of Clinical Oncology, Annals of Behavioral Medicine, American Journal of Preventive Medicine)